

REMARKS

Applicant respectfully requests reconsideration and allowance of all pending claims in view of the above-amendments and the following remarks.

I. CLAIM REJECTIONS UNDER §101

Claim 23 was rejected under 35 U.S.C. §101 as being allegedly directed to unpatentable subject matter.

With this Amendment, claim 23 is cancelled without prejudice.

II. CLAIM REJECTIONS UNDER §112

A. **§112, First Paragraph**

Claims 21 and 22 were rejected under §112, para. 1, as being “single means” claims.

Claims 21 and 22 are amended to include elements of independent claim 1 and are reformatted slightly to more clearly define subject matter that is more than a “single means”.

B. **§112, Second Paragraph**

Claims 1-22 were rejected under §112, para. 2, as being indefinite regarding the phrase “API-type source functions”.

Accordingly, claims 1 and 20 are amended to replace this phrase with, “API-type source functions” as suggested by the Examiner.

Also, various claims are amended to remove optional parenthetic phrases.

III. CLAIM REJECTIONS UNDER §102(b)

Claims 1-3, 8, and 11-23 were rejected as being allegedly anticipated by Andy , “Integrating monitoring and telemetry devices as part of enterprise information resources,” XP-002283767 (March 2002) (hereinafter referred to as the “IBM Document”).

A. **IBM document**

1.1 Summary of the document

The IBM document concerns a general protocol for MQ Integrator SCADA device (usually named MQIsdp) developed by the IBM Software Group. It deals with notions of “publish” and

“subscribe”, and illustrates some examples of application.

1.2 Relevance of the document

In accordance with the Examiner’s opinion, the IBM document discloses (using the terms of Applicant’s claim 1):

System for remote control of apparatuses (*« a system that manages the flow of information from remote devices to any enterprise applications that need the data », p.3, l.1-3, « telemetry integration applications », p.9, l.8*), enabling the interconnection between at least one broker (*« broker »*) and at least one remote apparatus (*« client »*) according to the MQIsdp protocol (*« this allows remote devices to connect to the broker using the MQIsdp protocol », p.9, l.2-3*), it associates, with at least one of said remote apparatuses, radiocommunication means (*« the devices communicate with the Arcom Director unit using 20-mile line-of-sight, spread-spectrum wireless links from Data-Linc Goup », p.12, l.3-4, « communicating through Very Small Aperture Terminal (VSAT) satellite links », p.13, l.3*);

API-type source functions enabling at least one application to be embedded (*« the application programming interface (API) presented to applications on the client device », p.9, l.15-17*).

1.2.2 Contrary to the Examiner’s opinion, the IBM document does not disclose (using the terms of Applicant’s claim 1):

- radiocommunication means capable of internally processing a communication protocol implementing API source functions available in a software platform (e.g., Open AT) enabling at least one application to be embedded;
- radiocommunication means are provided with a set of specific (API) functions enabling data to be exchanged with at least one server implementing said MQIsdp protocol, so as to enable an interconnection between said broker(s) and said remote apparatus(es) via said radiocommunication means, with the latter also managing at least one application between said broker(s) and said remote apparatus(es).

The Examiner raises the following extract (page 9, lines 15-17) of the IBM document: « The MQIsdp protocol specification is deliberately non prescriptive regarding the application programming interface (API) presented to applications on the client device. »

It seems that the Office Action does not apply the IBM document correctly to Applicant’s claim 1. This phrase means that the protocol does not describe means of using an application programming interface of the terminal in itself. Indeed, as a general principle, remote terminals comprise in their own integrated equipment (microprocessor, memory cards, etc...) a library of

functions to enable the terminal to understand instructions received by the broker according to the MQIsdp protocol. API functions are thus specific for each application of each terminal and are an integral part of the terminal which shall necessarily have a hardware architecture and software architecture so as to work according to the MQIsdp protocol.

The above-mentioned extract seems to suggest that this specification of MQIsdp protocol does not detail the set of API functions (whose the existence is evident) since they depend on each specific application of the terminal (or the “client”).

As a consequence, this extract is not relevant towards claim 1, and furthermore this constraining feature is part of the aspects that the one or more embodiments of the present invention tries to improve.

As a matter of fact, an embodiment of the present invention is characterized by the fact that the set of API functions is integrated in an independent module (or more generally in means of radiocommunication such as described in claim 1) performing the interconnection between the remote terminal (does not need to know the MQIsdp protocol) and the broker sending messages according to this MQIsdp protocol. Thanks to this independent module, the remote terminal (regularly limited in terms of resources and power) is no longer constrained to integrate a software architecture (for instance a telemetry architecture) and the corresponding protocol (MQIdsp), these functions being taken in hand by the module according to the present application.

Furthermore, the expressions used in claim 1, such as “platform” or “interconnection between at least one broker and at least one remote apparatus”, show that the above-meantioned means of radiocommunication specify a physical element, and more particularly a module which is external and associated to the remote equipment. To clarify this point, independent claims 1 and 20-22 are amended to specify the radiocommunication means is “external” to the remote apparatus.

As a consequence and contrary to the Examiner’s opinion, the IBM document is not relevant toward the invention as defined by independent claim 1 of the present patent application.

IV. CLAIM REJECTION UNDER §103(a)

Claims 4-7, 9 and 10 were rejected as being allegedly unpatentable over the IBM document in view of Petite U.S. Patent No. 7,103,511.

A. PETITE document : (U.S. 7,103,511 B2)

2.1 Summary of the document

The PETITE document deals with wireless communications networks for remote controlling and monitoring wireless devices. More particularly, this document concerns an automatic control system for controlling remote equipment implemented via a host computer, which is connected to a wide area network 120 (WAN) and comprising a plurality of wireless transceiver devices 125. Each transceiver device 125 has a unique identifier and means of:

- receiving a sensor data signal from one of remote devices;
- transmitting an original data message using a predefined wireless communication protocol comprising the corresponding unique identifier of device 125 and sensor data signal.

One of the plurality of transceiver devices 125 is in charge of sending the whole original data messages to an site controller 150, connected to the WAN 120, which is configured to manage communications between wireless communications networks (remote equipments) and the host computer connected to the WAN 120.

2.2 Relevance of the document

Even though the PETITE document treats of a system for monitoring and/or controlling a plurality of remote devices, there is nothing in PETITE that discloses or suggests any of the inventive features of claim 1, namely (using the terms of Applicant's claim 1):

- the fact that the system for remote control of apparatuses enables the interconnection between at least one broker and at least one remote apparatus according to the MQIsdp protocol;
- the fact that the system associates radiocommunication means capable of internally processing a communication protocol implementing API-type source functions available in a software platform (Open AT) enabling at least one application to be embedded ;
- the fact that said radiocommunication means are provided with a set of specific (API) functions enabling data to be exchanged with at least one server implementing said MQIsdp protocol, so as to enable an interconnection between said broker(s) and said remote apparatus(es) via said radiocommunication means, with the latter also managing at least one application between said broker(s) and said remote apparatus(es).

As a consequence, the PETITE document is not relevant toward the invention as defined by

independent claim 1 of the present patent application.

3. Non-relevance of the combination of IBM and PETITE documents

Neither the IBM document nor the PETITE document is relevant towards the invention as claimed by independent claim 1 as described above.

With neither the IBM document nor the PETITE document providing the inventive features of the independent claims, the combination of the PETITE and IBM documents does not disclose or suggest these features.

As a consequence, the combination of the PETITE and IBM documents does not render the inventive content of independent claim 1 obvious to a person of ordinary skill in the art, and a moreover does not render the inventive content of dependent claims 4-9, 10 obvious (at least because these claims depend on claim 1).

Accordingly, Applicant respectfully requests that the claim rejections under §§102 and 103 be withdrawn.

Respectfully submitted,
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